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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,105	01/26/2001	Dennis R. Wiese	5898-000159	7712

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EXAMINER

HINZE, LEO T

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 11/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,105

Applicant(s)

WIESE, DENNIS R.

Examiner

Leo T. Hinze

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 11-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

1. The election requirement of the previous office action is hereby repeated and made final.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 9, 14-16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dufour, et al. in view of Rebel, et al.

Dufour teaches: that ink build-up in non-print areas of ink rollers (2,3) of a printing press during printing is problematic (e.g. col. 1, lines 45-55), and suggests a solution of scraping one of a plurality of ink rollers with blades (7) to remove excess ink (claim 1); using the method for lithographic printing (e.g. co. 1, line 57) (claim 9); at least one printing unit having adjacent ink rollers (2,3), said ink rollers having terminal non-print areas (claim 14). Dufour does not teach: delivering a tack reducing solvent at a pre-determined rate to the print areas of a second ink roller, wherein the tack-reducing solvent is transferred from the non-print areas of the second ink roller to the non-print areas of successive adjacent ink rollers, and further when the rate is

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sufficient to prevent increase in ink tack in the non-print areas (claim 1); a solvent delivery system for delivering a tack-reducing solvent to the non-print areas of at least one ink roller at a rate sufficient to prevent increase in ink tack during printing in the non-print areas of said at least one ink roller and successive adjacent ink rollers (claim 14); wherein said solvent delivery system comprises a solvent line for moving the solvent to the non-print areas of the at least one ink roller and apertures in the solvent line to deliver the solvent to said non-print areas (claim 15); wherein the solvent delivery system further comprises a reservoir for containing the solvent from which reservoir the solvent line receives the solvent (claim 16).

Rebel teaches: applying a solvent to the terminal non-print areas of rollers (e.g. 4) of a printing press during printing (e.g. col. 2, lines 51-52) through spray means (2) to prevent a second material (varnish) applied to the rollers from drying, and thereby becoming sticky or tacky (claim 1); a solvent delivery system for delivering a tack-reducing solvent to the non-print areas of at least one ink roller at a rate (e.g. col. 2, lines 52-54) sufficient to prevent increase in ink tack during printing in the non-print areas of said at least one ink roller and successive adjacent ink rollers (claim 14); wherein said solvent delivery system comprises a solvent line (14) for moving the solvent to the non-print areas of the at least one ink roller and apertures (2) in the solvent line to deliver the solvent to said non-print areas (claim 15); wherein the solvent delivery system further comprises a reservoir (10) for containing the solvent from which reservoir the solvent line receives the solvent (claim 16); wherein the solvent line has at least two spaced apertures (2) that can be opened and closed (e.g. col. 2, lines 9-10) each end of said at least one ink roller (claim 19).

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With regard to claims 1, 14-16, and 19 it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the lithographic press of Dufour to use a system to deliver a tack-reducing solvent at a pre-determined rate to the non-print areas of a second ink roller, wherein the tack-reducing solvent is transferred from the non-print areas of the second ink roller to the non-print areas of successive adjacent ink rollers, and further when the rate is sufficient to prevent increase in ink tack in the non-print areas, because Rebel teaches that this is an effective way to reduce the tack of material in the non-print areas of rollers.

The method and apparatus of Rebel teach reducing the tack of varnish applied with the damping rollers. Varnish and ink in this case are analogous, as both are applied to the complete width of a roller in a printing machine, without regard to print and non-print areas. Additionally, both materials benefit from the addition of tack-reducing solvents, as both materials tend to become tacky as they dry. The damping rollers and ink rollers are also analogous, as both perform the equivalent functions of transferring to a blanket cylinder at one end of a roller train, through a roller train, material applied to the other end of the roller train.

With regard to claim 9, Dufour teaches a lithographic printing method, and the above combination of Dufour and Rebel teaches all that is claimed.

4. Claims 2, 6, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dufour, et al. in view of Rebel, et al. as applied to claims 1, and 14-16 above, and further in view of Switall.

Dufour and Rebel together teach all that is claimed as discussed above. The combination of these references results in: wherein a solvent line (Rebel, 14) carries the tack-reducing solvent

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from the reservoir and the tack-reducing solvent passes through an aperture (Rebel, 2) in the solvent line onto the non-print areas of the second ink roller (claim 6); and wherein the solvent delivery system further comprises a controller (Rebel, 9) for adjusting the rate of delivery of solvent to the non-print area (claim 18).

Dufour and Rebel do not teach: wherein step (b) is carried out by pumping the tack reducing solvent from a reservoir (claim 2); and wherein the solvent delivery system comprises a pump for pumping the solvent from the reservoir (claim 17).

Switall teaches: a fluid dispensing system for a printing machine wherein step (b) is carried out by pumping (e.g. col. 3 lines 51-57) the tack reducing solvent from a reservoir (38) (claim 2); and wherein the solvent delivery system comprises a pump (36) for pumping the solvent from the reservoir (38) (claim 17).

With regard to claims 2 and 17, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Dufour to include a pump for pumping solvent from a reservoir, as Switall teaches that a pump is an effective means from moving fluid from a reservoir through a delivery system.

With regard to claims 6 and 18, the above combination teaches all that is claimed.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dufour, et al. in view of Rebel, et al. as applied to claim 1 above, and further in view of Huebner.

Dufour and Rebel together teach all that is claimed as discussed above, except wherein the pre-determined rate of step (b) is adjusted according to the printing rate.

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Huebner teaches an apparatus for spraying fluid on rollers of a printing press, where the rate of supply is varied in accordance with the printing rate (e.g. col. 1, lines 38-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Dufour wherein the pre-determined rate of step (b) is adjusted according to the printing rate, because Huebner teaches that correlation between liquid supply rate and printing rate ensures the required amount of liquid is delivered to the printing machine.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dufour, et al., Rebel, et al., and Switall as applied to claim 2 above, and further in view of Takekoshi.

Dufour, Rebel, and Switall together teach all that is claimed as discussed above, except wherein a sensor signals when to add more tack-reducing solvent to the reservoir.

Takekoshi teaches a method of automatically replenishing dampening fluid in a printing press, wherein a sensor (22, 28) signals when to add more liquid to the reservoir (12, 26) (e.g. col. 6, lines 42-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Dufour to include level sensors to signal when to add more solvent to the reservoir, as Takekoshi teaches that it is desirable to have level sensors signal when the level of the reservoir is too low.

7. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dufour, et al. in view of Rebel, et al. as applied to claim 1 above, and further in view of Stein, et al.

Dufour and Rebel together teach all that is claimed as discussed above. The combination of these references results in: increasing the rate of delivery of the tack reducing solvent (e.g.

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Rebel col. 4, lines 11-14) (claim 5); and closing the aperture in the solvent line and opening a second aperture in the solvent line for solvent to pass onto the non-print areas closer to the edges of the second paper substrate (Rebel, e.g. col. 4, lines 23-25) (claim 7)

Dufour and Rebel do not teach replacing the paper substrate of step (a) with a second paper substrate having a narrower width (claims 5 and 7).

Stein teaches replacing the paper substrate of step (a) with a second paper substrate having a narrower width (e.g. col. 4, lines 50-57) (claims 5 and 7).

With regard to claims 5 and 7, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Dufour to replace the paper substrate of step (a) with a second paper substrate having a narrower width, because Stein teaches that it is sometimes desirable to use paper with a narrower width to print smaller format material. It would have been obvious to increase the rate of delivery of the tack-reducing solvent (claim 5) or to close the aperture in the solvent line and opening a second aperture in the solvent line for solvent to pass onto the non-print areas closer to the edges of the second paper substrate (claim 7) because Rebel teaches that it is desirable to modify the fluid dispensing system to meet the solvent requirements of the printing press.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dufour, et al. in view of Rebel, et al. as applied to claim 1 above, and further in view of Blim.

Dufour and Rebel together teach all that is claimed as discussed above, except wherein the tack-reducing solvent comprises a member selected from the group consisting of water,

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glycols, glycol ethers, aliphatic hydrocarbons, petroleum distillate fractions, normal and isoparaffinic solvents, and combinations thereof.

Blim teaches spraying an ink solvent on the surfaces of printing cylinders, the solvent being a variety of fluids, including water.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Dufour to use water as a tack-reducing solvent, because Blim teaches that water is an ink solvent.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dufour, et al. in view of Rebel, et al. as applied to claim 1 above, and further in view of De Marchi, et al.

Dufour and Rebel together teach all that is claimed as discussed above, except wherein the paper substrate is a super calendered paper.

De Marchi teaches printing with super calendered (e.g. col. 1, line 25) paper.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Dufour to print with super calendered paper, because De Marchi teaches that super-calendered paper has desirable properties that produce good quality printed material.

Conclusion

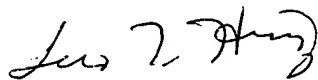
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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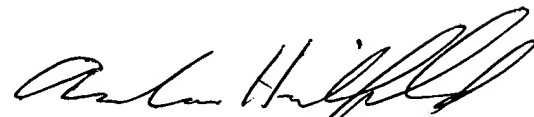
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (703) 305-3339. The examiner can normally be reached on M-F 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0952.



Leo T. Hinze
Patent Examiner
AU 2854
October 28, 2002



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